~~SECRET~~

DCS/D to ARDC staff

224

SUPPLEMENTAL HQ USAF GUIDANCE TO ARDC, SAC AND ADC CONCERNING SAMOS

1. Reference is made to paragraph 4 and 5 of secret letter, Exploitation of Initial SAMOS Data, AFDSD-AT, 1 June 1960.

2. In general, some of the questions raised by the Under Secretary and quoted in paragraph 4 of referenced letter cannot be finally answered until actual R&D test results are known. Further, this headquarters needs the benefit of ARDC's technical advice in order to arrive at tentative conclusions in some of the areas raised by the Under Secretary. Following paragraphs deal with the four questions in paragraph 4 of referenced letter in reverse order:

a. Reference paragraph 4.d. At this time this headquarters does not consider it absolutely essential that the data handling and photographic processing facilities be co-located with future control centers in all cases, if a recovery system is determined to be the most effective operational mode. However, co-location will be operationally necessary if the system is resolved to a readout mode and/or a combination of both. It should be pointed out that Air Force has a critical targeting requirement which requires the continuing improvement of data handling and processing facilities for the Strategic Air Command if that command is to continue to maximize its operational effectiveness. In the meantime, during the R&D phase, exploitation of the R&D take can logically be conducted at places other than the Sunnyvale control facility. R&D test results should enable us to arrive at a more definitive answer to the question of co-location of data processing, data handling and system operational control facilities. For discussion of integration of SAMOS and MIDAS control centers, see paragraph 3 below.

b. Reference paragraph 4.c. This headquarters recognizes that all plans for operational SAMOS systems have been based on the assumption that SAMOS will be essentially a peacetime system. Further this headquarters is aware of Hq Strategic Air Command's previous proposal that the system be hardened. This proposal was turned down, but in view of the Under Secretary's question, this point requires serious reconsideration. For the time being, the R&D effort and initial exploitation of R&D take will be considered peacetime operations and hence will be conducted in soft facilities. The initial studies in reconsideration of the final "hard" vs "soft" configuration must be concerned with technical and budget considerations involved in hardening the minimum facilities for post strike operations.

Request ARDC undertake such a study to determine:

(1) Is it possible to harden (or disperse) sufficient facilities to give the system a reasonable chance of survival?

(2) If so that are the minimum essential facilities which must be hardened to allow operational exploitation of SAMOS during and immediately after the first hours of general war? This question should be

~~SECRET~~

~~S E C R E T~~

SECRET

SSEH-44

#201

answered in two parts. Part one to be based on the assumption that primary operational dependence will be placed on readout systems and part two on the assumption that recoverable systems eventually become the major operational configuration.

(3) The added funds required by fiscal year to harden facilities required by each assumption above. Assume for this purpose that a go-ahead will be given in late CY 1961.

Since it is recognized that many of the same personnel currently engaged in revising the development plan will be required to conduct this study, it will not be required until 1 September.

c. Reference questions a. and b. The answer to question a. is directly dependent upon the final position on question c. Since a restudy of the "peacetime" vs. "wartime" utility of the system puts eventual use of the Martin Bomber Plant in question, the position of this headquarters is that a small area of this facility should not be reactivated at this time for the interim operational exploitation equipment. The action directed by paragraph 3c. of the referenced letter should consider all feasible methods of converting the R&D take into standard formats (9 inch photographic film and ELINT tapes) and providing duplicating services, bearing in mind that this is a photographic technical function demanding extremely high competence. The reactivation of a portion of the Martin Bomber Plant for this purpose will be authorized only if it can be shown that this is the most efficient and economical method of accomplishing these tasks. It is recognized that Strategic Air Command exploitation of the R&D take, once it is reduced to standard formats, is a different function and involves other factors. Hq Strategic Air Command will conduct a study of the exploitation problem (as differentiated from the processing and duplication problem) using ARDC estimates of reasonable R&D "take." This study will consider all reconnaissance exploitation facilities available to the command and total workloads. The object of the study will be to determine the following:

(1) How long existing facilities will be adequate for exploitation of the R&D take.

(2) Time-phased requirements and justification for additional facilities, if any are required.

The guidance in paragraphs 3c., 1 through 10 of the referenced letter will be used by ARDC in estimating reasonable R&D take and by SAC in conducting the above study. The SAC study should be provided this headquarters by 1 August.

3. It must be recognized by all concerned that the above guidance, as well as that contained in the letter referenced in paragraph 1 above, has serious implications in the MIDAS program. Because of the joint use

of many facilities, integration of the operational control centers for the two systems appears essential. It is obvious that, at least for the next few years, both systems will be operated out of the Sunnyvale facility. When the final decision is made on the nature and location of operational facilities, logic probably will force integration of the control centers. However, the requirement for integrating the MIDAS display generating facility and the SAMOS data processing facility is not so clear. Since the Sunnyvale facility probably is not capable of handling the MIDAS display generating equipment, some other location must be found. The NORAD complex in Colorado, where the BMEWS communication lines terminate, and where other warning functions are performed, appears to be a strong possibility. Request ARDC and ADC provide their views on the feasibility and desirability of locating this facility in Colorado. ARDC views should be provided when the revised development plan is submitted and ADC views within 10 days thereafter.

4. In addition to the comments specifically requested in the preceding paragraphs, all addressees are invited to comment on any of the ideas and policies discussed.